

CLAIMS

What is claimed is:

- 1 1. An apparatus for securing a fan to an electronic device, comprising:
2 a housing adapted to capture the fan therein, the housing comprising:
3 a first catch adapted to capture a fan having a first thickness within the housing; and
4 a second catch adapted to capture a fan having a second thickness within the housing,
5 the second thickness being different than the first thickness.
- 1 2. The apparatus, as set forth in claim 1, wherein the housing is adapted to be
2 removably and snappingly captured by the fixed member.
- 1 3. The apparatus, as set forth in claim 2, wherein the housing comprises a third
2 catch adapted to engage a first portion of the fixed member to secure the housing to the fixed
3 member.
- 1 4. The apparatus, as set forth in claim 3, wherein the housing comprises at least
2 one projection adapted to engage at least one opening in the fixed member to secure the
3 housing to the fixed member.
- 1 5. The apparatus, as set forth in claim 4, wherein the projection is adapted to
2 enable the housing to pivot relative to the fixed member to enable the third catch to engage
3 the first portion of the fixed member.

1 6. The apparatus, as set forth in claim 1, wherein the housing comprises a locator
2 adapted to engage a corresponding portion of the fixed member to prevent vertical movement
3 of the housing relative to the fixed member.

1 7. The apparatus, as set forth in claim 1, wherein at least one of the first catch
2 and the second catch comprises a sloped portion adapted to flex a portion of the fan housing
3 outward as a fan is disposed within the fan housing.

1 8. The apparatus, as set forth in claim 7, wherein at least one of the first catch
2 and the second catch comprises a flanged portion adapted to abut a fan disposed within the
3 fan housing to prevent the fan from being withdrawn from the fan housing.

1 9. The apparatus, as set forth in claim 1, wherein the housing is adapted to
2 capture a fan having a first width and a first height within the housing, the apparatus
3 comprising an adapter to enable a fan having at least one of a second width and a second
4 height to be captured by the housing, the second width and the second height being smaller
5 than the first width and the first height, respectively.

1 10. The apparatus, as set forth in claim 1, wherein the adapter is operable to
2 receive the fan having at least one of a second width and a second height, the adapter having
3 the first width and the first height.

1 11. An electronic device, comprising:
2 a chassis; and
3 a fan housing securable to the chassis and operable to capture one of either a first fan
4 having a first thickness within the fan housing or a second fan having a second thickness
5 different than the first thickness within the fan housing.

1 12. The electrical device, as set forth in claim 11, wherein the fan housing
2 comprises a first flexible member adapted to resiliently flex and capture a fan having the first
3 thickness.

1 13. The electrical device, as set forth in claim 12, wherein the fan housing
2 comprises a second flexible member adapted to resiliently flex and capture a fan having the
3 second thickness.

1 14. The electrical device, as set forth in claim 11, wherein the fan housing and
2 chassis are adapted to enable the chassis to capture the fan housing without use of a tool.

1 15. The electrical device, as set forth in claim 14, wherein the fan housing
2 comprises a third flexible member adapted to be captured by a chassis member without use of
3 a tool.

1 16. The electrical device, as set forth in claim 15, wherein the third flexible
2 member may be flexed to disengage the third flexible member from the chassis member.

1 17. The electrical device, as set forth in claim 11, wherein the fan housing consists
2 essentially of a polymeric material.

1 18. The electrical device, as set forth in claim 11, comprising an electronic
2 component housed within the chassis, wherein the first fan provides a flow of air to cool the
3 electronic component.

1 19. A method of installing a fan within an electrical device, comprising:
2 disposing a fan having a first thickness within a fan housing operable to capture
3 toollessly each of the fan having a first thickness and a fan having a second thickness
4 different than the first thickness when disposed therein; and
5 disposing the fan housing within a portion of the electrical device adapted to capture
6 the fan housing when disposed therein.

1 20. The method as recited in claim 19, wherein disposing a fan having a first
2 thickness within a fan housing comprises engaging a catch adapted to capture the fan having
3 a first thickness within the fan housing.

1 21. The method as recited in claim 20, wherein disposing the fan housing
2 comprises generating an audible snap to announce securement of the fan housing to the
3 electrical device.

1 22. The method as recited in claim 19, comprising:
2 disposing a fan having a second thickness within a second fan housing operable to
3 capture each of the fan having a first thickness and the fan having a second thickness when
4 disposed therein; and
5 disposing the second fan housing within a portion of the electrical device adapted to
6 capture the fan housing when disposed therein.

1 23. The method as recited in claim 22, wherein disposing a fan having a second
2 thickness within a second fan housing comprises engaging a catch adapted to capture the fan
3 having a second thickness within the fan housing.

1 24. A system for installing one of a plurality of different fans within one or more
2 electrical devices, comprising:
3 means for capturing a first fan having a first thickness within a fan mounting member;
4 and
5 means for alternatively capturing a second fan having a second different thickness
6 within the fan mounting member.

1 25. The system as recited in claim 24, comprising means for capturing the fan
2 mounting member with a portion of an electrical device.

1 26. The system as recited in claim 24, comprising the first fan.

1 27. The system as recited in claim 26, comprising a processor, wherein the first
2 fan is operable to provide a flow of air to cool the processor.

1 28. The system as recited in claim 24, comprising the second fan.

1 29. An apparatus for securing a fan to an electronic device, comprising:
2 a first catch operable to capture a fan within the apparatus;
3 a securing member operable to engage a first portion of the electronic device; and
4 a pivoting member operable to engage a second portion of the electronic device to
5 enable the apparatus to pivot relative to the electronic device to engage the
6 securing member with the first portion of the electronic device.

1 30. The system as recited in claim 29, comprising a projection adapted to engage a
2 corresponding recess in the electronic device as the apparatus is pivoted to engage the
3 securing member with the first portion of the electronic device.